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EXAMINER

WANG, JIN CHENG

ART UNIT	PAPER NUMBER
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2672

18

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,913

Applicant(s)

TAKEUCHI ET AL.

Examiner

Jin-Cheng Wang

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 5/26/2004 has been entered. Claims 1, 6, 11, 16, and 20 have been amended. Claims 1-27 are pending in the present application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-9, 11-14, and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Odryna et al. U.S. Pat. No. 6,333,750 (hereinafter Odryna).

4. Claim 1:

Odryna teaches an overlay image processing device for generating an overlay image signal composed of an n number of selected image signals, n being an integer greater than 2, the overlay image processing device comprising:

A plurality of digital decoders configured to digitally decode a plurality of image signals (*e.g., each of the plurality of digital decoder incorporated in each of the input cards, Input A, Input B, Input C of Figure 17 wherein the input cards, Input A or Input B or Input C of Figure 17*

Art Unit: 2672

are shown in Figure 21 with each input card having a digital decoder 182 of Fig. 21; see column 15-22);

An image selector (A combination of control elements and memories within the circuit blocks of Fig. 17 constitutes an image selector. For example, the combination of the control block 111 shown in Fig. 18 within the system card 110 of Fig. 17, the control array 188 and the memories 186 shown in Fig. 21 within the Input A, or Input B, or Input C of Fig. 17 constitutes the image selector. This is because the control block 111 is responsible for issuing the instructions for the overlay of the image layers; see column 17. It also controls the control gate arrays within the other input cards wherein each of the control gate arrays is programmed via the serial control buses; see column 21. Note that all the control gate arrays are programmed by the control block 111 of the system card 110 via the serial control bus to control the overlay of the base image with other images) configured to directly receive outputs from each of the plurality of digital decoders (the outputs of the decoder 182 are directly sent to the image selector comprising the control array 188 and the memories 186 of Fig. 21 and the control block 111 of Fig. 18) and configured to select from among a plurality of digitally decoded image signals one reference image signal (the base image) and (n-1) number of superimposing image signals (See, column 15-25);

A plurality of resolution converters (The scaler 184 of Figure 21 meets the claim limitation of a resolution converter because column 20-21 of Odryna teaches another embodiments of the BVIDEO overlay card of Fig. 21 wherein the scaler 184 is utilized at the output of the buffer memory 186 and the scaler 184 directly receives image data outputs from the buffer memory 186 which are controlled by the control gate array 188. Odryna teaches a

Art Unit: 2672

plurality of resolution converters because each of the plurality of the input cards, Input A, Input B, Input C of Fig. 17 has a scaler 184) configured to directly receive the selected image signals output from the image selector, such that each resolution converter can input any of the respective outputs, to convert resolutions of the n number of selected image signals into respective desired resolutions (column 20), and to output the converted image signals to an image synthesizer (the pixel bus 114 constitutes an image synthesizer performing overlaying operation on a pixel-by-pixel basis; see for example, column 20, lines 15-20; column 15, lines 58-67; column 16, lines 1-15),

wherein the image synthesizer is configured to superimpose the (n-1) number of converted superimposing image signals on the converted one (1) reference signal (e.g., column 20, lines 15-20; column 15, lines 58-67; column 16, lines 1-15).

Claim 2:

The claim 2 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of at least one of the plurality of image signals being a display signal output from a personal computer. However, Odryna further discloses the claimed limitation of at least one of the plurality of image signals being a display signal output from a personal computer (e.g., column 18).

Claim 3:

The claim 3 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of the image selector selects the reference image signal and the (n-1) number of superimposing image signals according to an arbitrary predetermined order of superposition

Art Unit: 2672

for the n number of image signals; and the image synthesizer superimposes the $(n-1)$ number of converted superimposing image signals on the converted reference image signal according to the order of superposition.

However, Odryna further discloses the claimed limitation of the image selector selects the reference image signal and the $(n-1)$ number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and the image synthesizer superimposes the $(n-1)$ number of converted superimposing image signals on the converted reference image signal according to the order of superposition (e.g., figures 17-21; column 15-25).

Claim 4:

The claim 4 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of a scan converter configured to convert at least one of the interlaced image signals selected by the image selector into a non-interlaced image signals selected by the image selector into a non-interlaced image signal when the at least one of the image signals selected by the image selector is an interlaced image signal.

However, Odryna further discloses the claimed limitation of a scan converter configured to convert at least one of the interlaced image signals selected by the image selector into a non-interlaced image signals selected by the image selector into a non-interlaced image signal when the at least one of the image signals selected by the image selector is an interlaced image signal (e.g., figures 17-21; column 15-25).

Art Unit: 2672

5. Claim 6:

Odryna teaches an overlay image display device for displaying an overlay image composed of an number of selected images, n being an integer greater than 1, the overlay image display device comprising:

An overlay image processing device (figure 17) for generating an overlay image signal composed of an n number of superimposed image signals, and the overlay display device for displaying an image represented by the overlay image signal; wherein the overlay image processing device (e.g., figure 17-21; column 15-25) includes:

A plurality of digital decoders configured to digitally decode a plurality of image signals (*e.g., each of the plurality of digital decoder incorporated in each of the input cards, Input A, Input B, Input C of Figure 17 wherein the input cards, Input A or Input B or Input C of Figure 17 are shown in Figure 21 with each input card having a digital decoder 182 of Fig. 21; see column 15-22*);

An image selector (*e.g., A combination of control elements and memories within the circuit blocks of Fig. 17 constitutes an image selector. For example, the combination of the control block 111 and memories 186 shown in Fig. 18 within the system card 110 of Fig. 17, the control array 188 and the memories 186 shown in Fig. 21 within the Input A, or Input B, or Input C of Fig. 17 constitutes the image selector. This is because the control block 111 is responsible for issuing the instructions for the overlay of the image layers; see column 17. It also controls the control gate arrays within the other input cards wherein each of the control gate arrays is programmed via the serial control buses; see column 21. Note that all the control gate arrays are programmed by the control block 111 of the system card 110 via the serial control bus to*

Art Unit: 2672

control the overlay of the base image with other images) configured to directly receive outputs from each of the plurality of digital decoders (*the outputs of the decoder 182 are directly sent to the image selector comprising the control array 188 of Fig. 21 and the control block 111 of Fig. 18*) and configured to select from among a plurality of digitally decoded image signals one reference image signal and (n-1) number of superimposing image signals (See, column 15-25);

A plurality of resolution converters (*The scaler 184 of Figure 21 meets the claim limitation of a resolution converter because column 20-21 of Ordyna teaches another embodiments of the BVIDEO overlay card of Fig. 21 wherein the scaler 184 is utilized at the output of the buffer memory 186 and therefore the scaler 184 directly receives image data outputs from the buffer memory 186 which are controlled by the control gate array 188. Ordyna teaches a plurality of resolution converters because each of the plurality of the input cards, Input A, Input B, Input C of Fig. 17 has a scaler 184*) configured to directly receive the selected image signals output from the image selector, such that each resolution converter can input any of the respective outputs, to convert resolutions of the n number of selected image signals into respective desired resolutions (column 20), and to output the converted image signals to an image synthesizer (the pixel bus 114 constitutes an image synthesizer performing overlaying operation on a pixel-by-pixel basis; see for example, column 20, lines 15-20; column 15, lines 58-67; column 16, lines 1-15),

wherein the image synthesizer is configured to superimpose the (n-1) number of converted superimposing image signals on the converted one (1) reference signal (e.g., column 20, lines 15-20; column 15, lines 58-67; column 16, lines 1-15).

Art Unit: 2672

Claim 7:

The claim 7 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of at least one of the plurality of image signals being a display signal output from a personal computer. However, Odryna further discloses the claimed limitation of at least one of the plurality of image signals being a display signal output from a personal computer (e.g., column 18).

Claim 8:

The claim 8 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of the image selector selects the reference image signal and the $(n-1)$ number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and the image synthesizer superimposes the $(n-1)$ number of converted superimposing image signals on the converted reference image signal according to the order of superposition. However, Odryna further discloses the claimed limitation of the image selector selects the reference image signal and the $(n-1)$ number of superimposing image signals according to an arbitrary predetermined order of superposition for the n number of image signals; and the image synthesizer superimposes the $(n-1)$ number of converted superimposing image signals on the converted reference image signal according to the order of superposition (figures 17-21; column 15-25).

Claim 9:

Art Unit: 2672

The claim 9 encompasses the same scope of invention as that of claim 6 except additional claimed limitation identical to that set forth in claim 4. The claim 9 is rejected for the same reason set forth in claim 4.

6. Claims 11-14:

Each of the claims 11-14 is a rephrasing of the claims 1-4 respectively in a method form. The claims are rejected for the same reason as set forth above.

7. Claims 16-19:

Each of the claims 16-19 encompasses the same scope of invention as that of claims 1-4. The claims are subject to the same rationale of rejection set forth in claims 1-4.

8. Claims 20-23:

Each of the claims 20-23 is a rephrasing of the claims 16-19 respectively in a method form. The claims are rejected for the same reason as set forth above.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odryna et al. U.S. Pat. No. 6,333,750 (hereinafter Odryna) in view of Glen U.S. Patent No. 6,157,415 (Glen).

Claim 5:

(1) The claim 5 encompasses the same scope of invention as that of claim 1 except additional claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal; the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of i th stage, where i is between 2 and n , inclusive, uses an output of the 2-input image synthesizer of $(i-1)$ th stage as the lower-side image signal and i th superimposing image signal as the upper-side image signal.

(2) Odryna teaches the limitation set forth in the claim 1. However, Odryna lacks a full disclosure of the claim limitation.

(3) However, Glen further discloses the claimed limitation of the image synthesizer having the n number of 2-input image synthesizers, each 2-input image synthesizer being configured to receive upper-side and lower-side image signals and superimpose the upper-side image signal on the lower-side image signal; the n number of 2-input image synthesizers being connected in series in multistage fashion such that the 2-input image synthesizer of a first stage uses the reference image signal as the lower-side image signal and a first superimposing image signal as the upper-side image signal, while the 2-input image synthesizer of i th stage, where i is between 2 and n , inclusive, uses an output of the 2-input image synthesizer of $(i-1)$ th stage as

Art Unit: 2672

the lower-side image signal and its superimposing image signal as the upper-side image signal (Glen figures 5, 6 and 9, and column 3, lines 51-65).

(4) It would have been obvious to one of ordinary skill in the art to have incorporated the Glen's image synthesizer into the Odryna's overlay image processing device because Odryna suggests overlaying data can be merged into the base image on the pixel bus 114 on a pixel-by-pixel basis or according to various algorithms pre-programmed into the local control gate array and therefore suggesting the overlay steps can be controlled in a multistage fashion according to the overlay window (Odryna column 20-21; column 15-16).

(5) One having the ordinary skill in the art would have been motivated to do this because it would have provided a multistage synthesis for overlaying the portions of the input images (Glen column 3-4).

Claim 10:

The claim 10 encompasses the same scope of invention as that of claim 6 except additional claimed limitation identical to that set forth in claim 5. The claim 10 is rejected for the same reason set forth in claim 5.

Claim 15:

The claim 15 is a rephrasing of the claim 5 respectively in a method form. The claims are rejected for the same reason as set forth above.

Art Unit: 2672

11. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odryna et al. U.S. Pat. No. 6,333,750 (hereinafter Odryna).

Claim 24-25:

(1) The claim 24 encompasses the same scope of invention as that of claim 6 except additional claimed limitation of the respective outputs of the image selector include an analog RGB signal and a horizontal sync signal, wherein each of the resolution converters generates a clock signal synchronized with the horizontal sync signal and corresponding to a pixel clock for the analog RGB signal, and quantizes the RGB signal in synchronism with the clock signal to convert the analog RGB signal to a digital RGB signal, and wherein a single image signal element quantized by each of the resolution converters corresponds to one pixel of the image represented by the RGB signal.

(2) Odryna teaches the limitation set forth in the claim 6. However, Odryna's teaching of the resolution converter is configured by separating functionality of image decoding and resolution converting.

(3) Odryna teaches the image decoder for converting analog RGB signal to a digital RGB signal wherein the image decoder and the scaler of Figure 21 meets the claim limitation recited in claim 24.

(4) It would have been obvious to one of ordinary skill in the art to have moved some functionality from the image decoder into the resolution converter of Odryna because the circuits of the image decoder can be reconfigured and therefore by incorporating some of the

Art Unit: 2672

reconfigured circuits into the scaler of Figure 21 of Odryna a new resolution converter can be constructed.

(5) One having the ordinary skill in the art would have been motivated to do this because it would have provided a resolution converter with additional functionalities.

Claim 25:

The claim 25 is subject to the same rationale of rejection set forth in the claim 24.

Claim 26:

The claim 26 is subject to the same rationale of rejection set forth in the claim 24.

Claim 27:

The claim 27 is subject to the same rationale of rejection set forth in the claim 24.

Remarks

12. Applicant's arguments, filed 05/26/2004, paper number 17, have been fully considered but they are not deemed to be persuasive.

13. The Applicant argues in essence with respect to the amended claim 1 and similar claims that:

(A) "With respect to the first (1) limitation, the input and output arrows of Figures 17 of Odryna show that the input interface cards A, B have outputs only to the pixel and control buses, and further show that the pixel and control buses do not have output to the system card 110. Therefore, as the system card 110 cannot receive (directly or indirectly)

Art Unit: 2672

the outputs of the input interface cards A, B, those cards 110, A, B cannot teach the claimed configuration of the image selector and digital decoders of Claim 1.”

In response to the arguments in (A), the Examiner has introduced a new ground of rejection due to the amended claims. The arguments in (A) are now irrelevant in view of the new ground of rejection because the arguments in (A) are directed toward the new claim limitation set forth in the amended claim 1.

Nevertheless, Odryna teaches an overlay image processing device set forth in the claim 1. For example, Odryna teaches a plurality of digital decoders configured to digitally decode a plurality of image signals wherein each of the plurality of digital decoder incorporated in each of the input cards, Input A, Input B, Input C of Figure 17. Each of the input card as shown in Figure 21 has a digital decoder 182; see column 15-22.

Odryna further teaches an image selector wherein a combination of control elements and memories within the circuit blocks of Fig. 17 constitutes an image selector. For example, the combination of the control block 111 shown in Fig. 18 within the system card 110 of Fig. 17, the control array 188 and the memories 186 shown in Fig. 21 within the Input A, or Input B, or Input C of Fig. 17 constitutes the image selector. This is because the control block 111 is responsible for issuing the instructions for the overlay of the image layers; see column 17. It also controls the control gate arrays within the other input cards wherein each of the control gate arrays is programmed via the serial control buses; see column 21. Note that all the control gate arrays are programmed by the control block 111 of the system card 110 via the serial control bus to control the overlay of the base image with other images. Odryna thus teaches that the outputs of the

Art Unit: 2672

decoder 182 are directly sent to the image selector comprising the control array 188 of Fig. 21 and the control block 111 of Fig. 18.

Finally, Odryna teaches a plurality of resolution converters because the scaler 184 of Figure 21 meets the claim limitation of a resolution converter. In column 20-21, Odryna teaches another embodiments of the BVIDEO overlay card of Fig. 21 wherein the scaler 184 is utilized at the output of the buffer memory 186 and therefore the scaler 184 directly receives image data outputs from the buffer memory 186 which are controlled by the control gate array 188.

Therefore, Odryna fulfills the amended claim 1 as currently drafted.

14. The Applicant argues in essence with respect to the amended claim 1 and similar claims that:

(B) "With respect to the second (2) limitation, as the system card 110 cannot receive outputs from the interface input cards A, B, the system card 110 also cannot select image signals output from those cards A, B. Thus, even assuming the input interface cards A, B (by incorporating the BVIDEO overlay card 180) contain digital decoders (not admitted), the system card 110 could not select image signals output from such digital decoders."

In response to the arguments in (B), Odryna teaches an image selector wherein a combination of control elements and memories within the circuit blocks of Fig. 17 constitutes an image selector. For example, the combination of the control block 111 shown in Fig. 18 within the system card 110 of Fig. 17, the control array 188 and the memories 186 shown in Fig. 21 within the Input A, or Input B, or Input C of Fig. 17 constitutes the image selector. This is

Art Unit: 2672

because the control block 111 is responsible for issuing the instructions for the overlay of the image layers; see column 17. It also controls the control gate arrays within the other input cards wherein each of the control gate arrays is programmed via the serial control buses; see column 21. Note that all the control gate arrays are programmed by the control block 111 of the system card 110 via the serial control bus to control the overlay of the base image with other images.

Odryna teaches that the outputs of the decoder 182 are directly sent to the image selector comprising the control array 188 of Fig. 21 and the control block 111 of Fig. 18.

Therefore, the image selector as taught by Odryna directly receives outputs from each of the plurality of digital decoders and then stored in the memories 186. The image selector selects from among the plurality of digitally decoded image signals stored in the memories 186 in each of the plurality of the input cards as shown in Fig. 17. The Examiner therefore asserts that Odryna teaches the second claim limitation set forth in the claim 1.

15. The Applicant argues in essence with respect to the amended claim 1 and similar claims that:

(C) "With respect to the third (3) limitation, Applicants note that input interface cards A, B cannot receive inputs, directly or indirectly, from the system card 110. Thus, even assuming that the input cards A, B (by incorporating the BVIDEO overlay card 180) contain resolution converters (not admitted), such resolution converters could not receive selected image signals output from the system card 110. Further, even assuming the scaler 184 of the BVIDEO overlay card 180 performs resolution conversion (not admitted), the scaler 184 could not receive signals directly output by an image selector to

Art Unit: 2672

the BVIDEO overlay card 180 because of the placement of the broadcast video decoder 182.”

In response to the arguments in (C), Odryna teaches a plurality of resolution converters because the scaler 184 of Figure 21 meets the claim limitation of a resolution converter. In column 20-21, Odryna teaches another embodiments of the BVIDEO overlay card of Fig. 21 wherein the scaler 184 is utilized at the output of the buffer memory 186 and therefore the scaler 184 directly receives image data outputs from the buffer memory 186 which are controlled by the control gate array 188. The Examiner asserts that Odryna teaches a resolution converter within each of the input cards shown in Fig. 17 because the resolution converter (scaler 184) directly receives image data outputs from the image selector comprising the buffer memory 186 and the control gate array 188 as well as the control block 111. Moreover, Odryna teaches a plurality of the resolution converters because each of the plurality of the input cards, Input A, Input B, Input C of Fig. 17 has a scaler 184. Therefore, Odryna fulfills the third claim limitation set forth in the claim 1.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2672

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

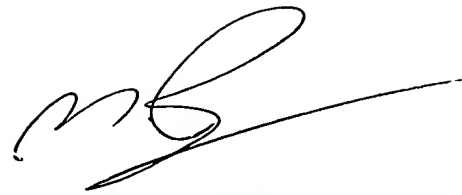
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jcw

Application/Control Number: 09/801,913
Art Unit: 2672

Page 19

A handwritten signature in black ink, appearing to read 'MR', with a long horizontal line extending to the right.

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600